

Tracking the Covid-19 Pandemic in Africa:

A Brief Data Profile



The Brenthurst Foundation



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I: Background

The Covid-19 pandemic has resulted in probably the greatest social and economic disruption the modern world has witnessed. In this brief statistical note, we explore its manifestations in Africa, with a focus on a few key features of the pandemic in Africa and an overview of some of the early responses by African governments to the pandemic. By the March 27th 2020, COVID-19 had spread to all continents, affecting 177 countries (Martinez-Alvarez et al., 2020). In Africa, Egypt confirmed the first case of COVID-19 on the 14th of February 2020 (Financial Times, 2020) – with pandemic spreading steadily across the continent thereafter.

II: Covid-19 Cases, Deaths and Testing in Africa: A Global Comparison

Table I provides an overview of the key statistical estimates of the pandemic. It is clear for example, that by August 7th, 2020 – the world had recorded a total of 19 million Covid-19 cases. Of these cases, about 714 000 deaths have been recorded. The regional spread of Covid-19 cases and deaths however is instructive: It suggests that of the 19 million cases, about 1 million of these were located in Africa, constituting about 5% of the world's active cases at the time of recording. Crucially – Africa's share of the world's population at 17.2% suggests a significant under-representation of Covid-19 on the continent. In contrast, Europe and North America currently carry a disproportionate share of the burden of Covid-19 cases relative to their global population share.

Table I: COVID-19 Cases and Deaths: 7th August, 2020

Region	Total cases	Total Deaths	Share of Cases	Share of Deaths	2020 population estimates ('000)	Population share
Oceania	21 813	288	0.11	0.04	42 678	0.55
Africa	1 010 000	22080	5.30	3.09	1 340 598	17.2
North America	5 790 000	227421	30.36	31.82	368 870	4.73
Asia	4 780 000	105062	25.06	14.70	4 641 055	59.54
Europe	2 950 000	205179	15.47	28.71	747 636	9.59
South America	4 520 000	154581	23.70	21.63	653 962	8.39
World	19 071 813	714 611	100	100	7 794 799	100

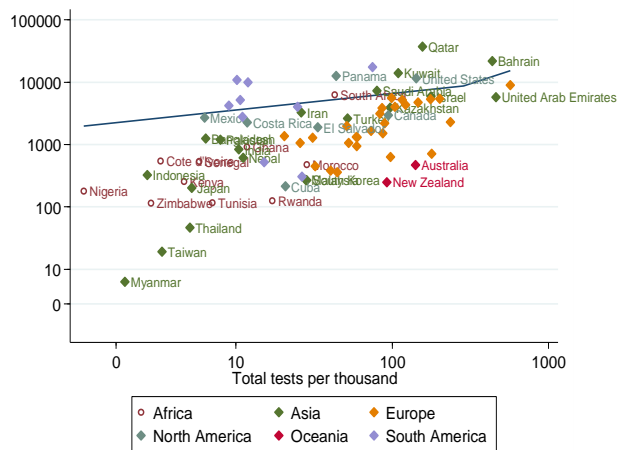
Source: Own calculations, Our World in Data (2020)

It is also true that Africa as a consequence, carries a much lower share of the world's Covid-19 deaths. Accounting for 3.1% of all recorded Covid-19 deaths, the region's Covid-19 mortality share is significantly lower than the developed world.

III: Covid-19 Tests, Cases and GDP per capita

As Figure 1 clearly shows, higher levels of testing per thousand at the country level, increases the number of Covid-19 cases per million detected by a country. In addition, the data illustrates clearly that the majority of African economies, with the exception of South Africa, are testing less compared developing countries in LAC for example. African testing levels though seem similar to a number of Asian economies such as Myanmar, Taiwan and Thailand. Interestingly, the variance in the number of Covid-19 cases, for a given similar number of tests, suggests of course that Covid-19 cases are driven by more than just the number of tests.

Figure 1: Total Tests per thousand & Total Cases per million, By Country



Source: Own calculations, Our World in Data (2020)

Figure 2: Total Covid-19 Cases per million & GDP per capita, By Country

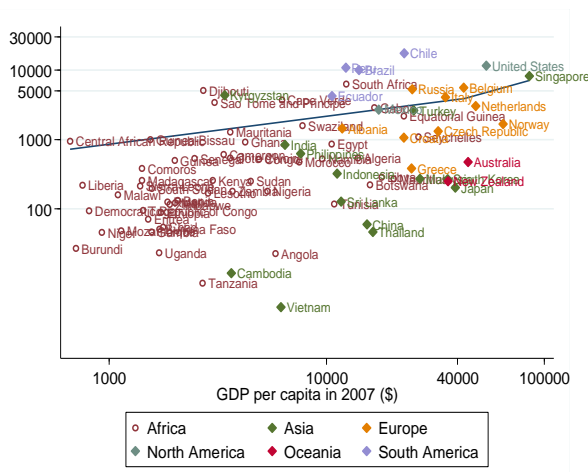


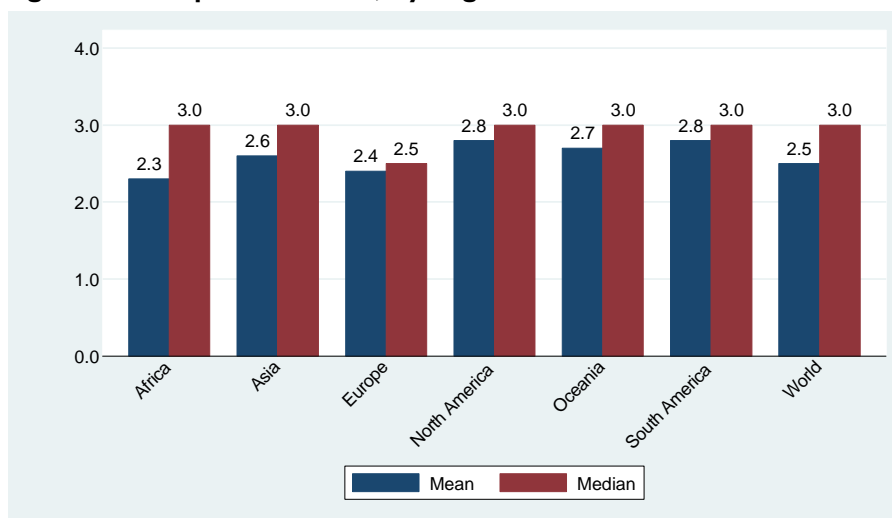
Figure 2 confirms the data in Table 1, namely that higher levels of GDP per capita across regions and countries – have been associated with a higher number of Covid cases per million. African economies – stacked at the lower left portion of the graphic – suggests the bias of cases towards richer economies. Again though, for a given level of GDP per capita, there is a fairly wide range of Covid-19 cases – suggesting that income alone is not the determinant of Covid-19 case incidence.

IV: Management and Control of Covid-19

To prevent and control the possible importation of cases, countries have of course sought to institute several measures to curb the cross-border and internal domestic spread of the virus. The application and execution of strict measures of detection, control and prevention are important in the process of curbing the spread of coronavirus (Douglas et al., 2020). We present some baseline data in this regard across a range of indicators.

Figure 3 show the mean and median of countries which implemented workplace lockdown by region. A higher mean show that most countries had workplace closures. On a scale of 0 to 3, on average, African countries implemented less workplace lockdown compared to other regions. With cases in Africa being lower relative to the rest of the world, the majority of non-African countries on average implemented slightly stricter workplace lockdowns.

Figure 3: Workplace Closures, By Region

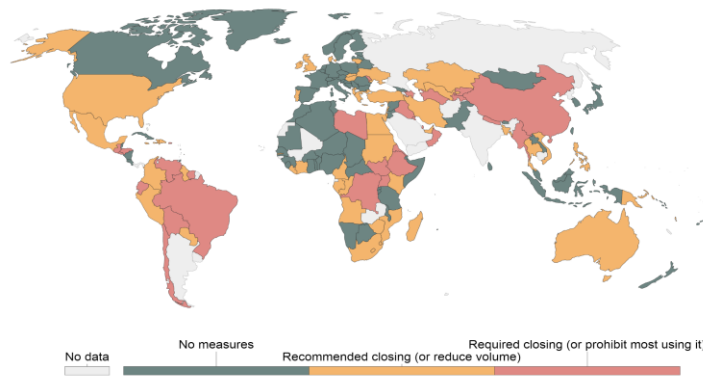


Source: Own calculations, Our World in Data (2020)

It is recommended that social distancing, wearing a mask and sanitising are effective in minimising the spread of respiratory tract infections such as coronavirus (Jefferson et al., 2009). One of the social distancing measure that countries have implemented is halting and reducing the use of public transportation.

Figure 4: Public Transport Closures, By Stringency of Measure

Public transport closures during the COVID-19 pandemic, Jul 21, 2020

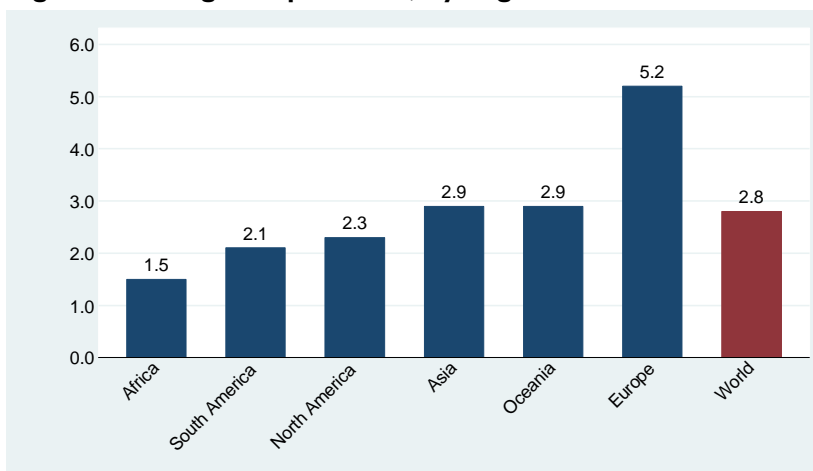


Source: Hale, Webster, Petherick, Phillips, and Kira (2020). Oxford COVID-19 Government Response Tracker – Last Updated 22nd July.
 Note: The policies shown may not apply at all sub-national levels. A country is coded as having these restrictions if at least some sub-national regions have implemented them.
 OurWorldInData.org/coronavirus • CC BY

Figure 4 shows public transport closures during the pandemic as of 21 July 2020. Most West African countries did not restrict the use of public transport. However, in general, most sub-Saharan countries have closed or reduced the volume of using public transport.

Africa remains however, the most vulnerable continent against the risk of COVID-19 because of poor health care systems (Martinez-Alvarez et al., 2020). Figure 5 shows the average number of beds by region. Africa and America have the lowest number of beds compared to their counterparts, while Europe has the highest number of beds per thousand individuals.

Figure 5: Average Hospital Beds, By Region



Source: Own calculations, Our World in Data (2020)

Notably, the only region with a per capita household bed count above the global average is Europe.

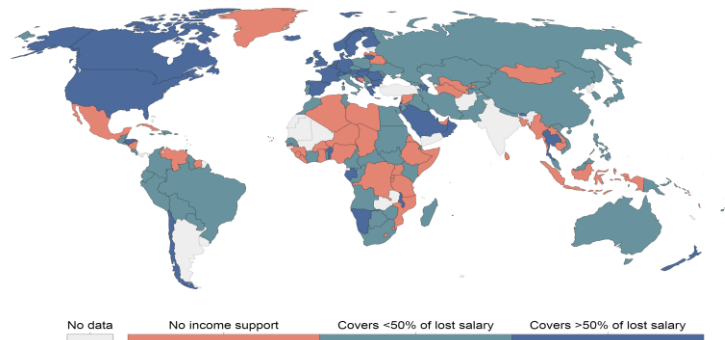
V: Stimulus Packages, Income Support and Debt

Figure 6 shows government support in covering salaries or providing direct payments via social assistance for example, to individuals affected by the pandemic. The pervasive nature of this income support globally is clear. However, in Africa, 23 out of 50 African countries have not offered any form of income support. (own calculations, Our World of Data; 2020).¹

¹ Only 4 African countries do not have data

Figure 6: Income Support

Income support during the COVID-19 pandemic, Jul 21, 2020
Income support captures if the government is covering the salaries or providing direct cash payments, universal basic income, or similar, of people who lose their jobs or cannot work.

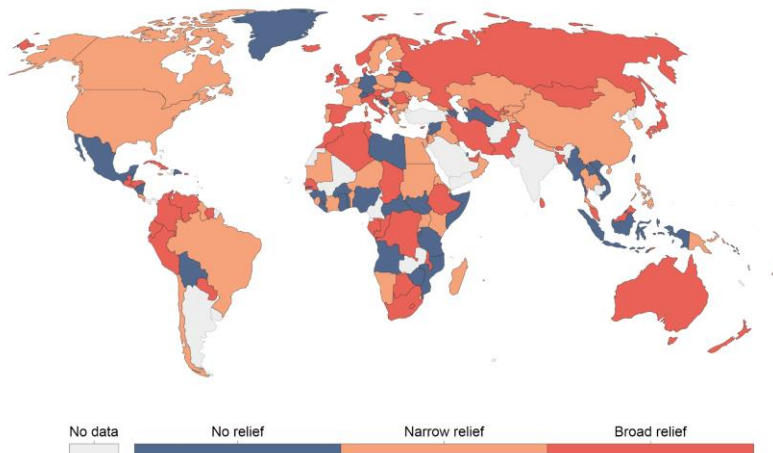


Source: Hale, Webster, Petherick, Phillips, and Kira (2020). Oxford COVID-19 Government Response Tracker – Last Updated 23rd July.
Note: This income support may not apply to workers in all sectors, and may vary at the sub-national level.
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In addition to income support, governments across the world have introduced debt or some of contract relief. Figure 7 shows countries which froze obligations during the COVID-19 pandemic such as stopping loan payments, preventing services like water cuts or banning evictions.

Figure 7: Debt or Contract Relief

Debt or contract relief during the COVID-19 pandemic, Jul 22, 2020
Debt or contract relief captures if the government is freezing financial obligations during the COVID-19 pandemic, such as stopping loan repayments, preventing services like water from stopping, or banning evictions.

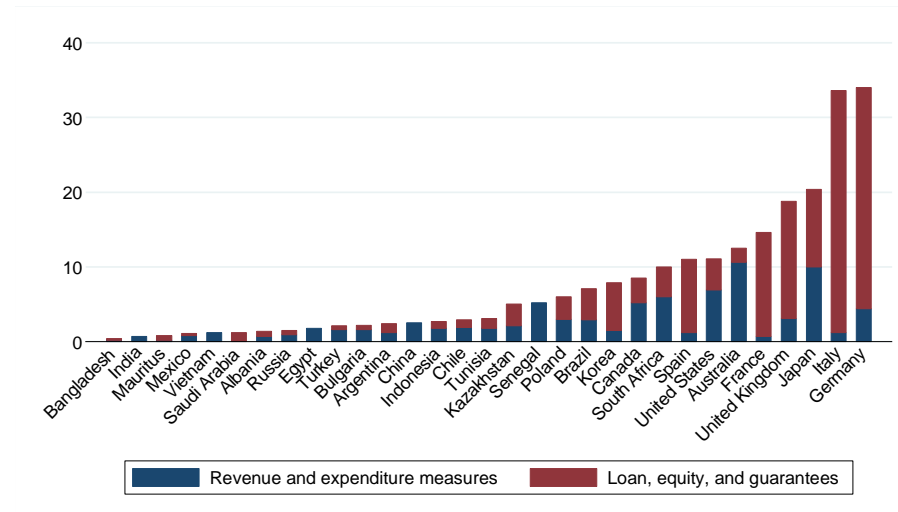


Source: Hale, Webster, Petherick, Phillips, and Kira (2020). Oxford COVID-19 Government Response Tracker – Last Updated 22nd July.
OurWorldInData.org/coronavirus • CC BY

A fair number of sub-Saharan countries have offered additional support in the form of debt relief. South Africa, Botswana, Zimbabwe, Gabon, Democratic Republic of Congo and Ethiopia are amongst countries that offered broad relief.

Figure 8 compares economic support through revenue and spending measures across countries. In South Africa, the broad fiscal stimulus package accounts for approximately 10 percent of GDP (National Treasury, 2020).

Figure 8: Stimulus Packages as Share of GDP, By Country



Source: IMF, Fiscal Monitor (2020) and National Treasury (2020)

This is the largest fiscal support in Africa, and also across a sample of developing countries. COVID-19 and its economic consequences will cause a significant increase in fiscal deficits and public debt (IMF, 2020).

V: Conclusion

Estimates of the impact of the Covid-19 pandemic, reveal that Europe and North America account for over 45% of cases globally, and also 60% of all Covid-19 deaths thus far. We note that thus far, Africa is under-represented – relative to its share of the world’s population – in both Covid-19 case and death numbers. Notably, whilst testing numbers positively vary with case numbers, the within-tests range suggests sufficient variation in country Covid-19 cases numbers. In turn, whilst higher levels of GDP per capita are correlated with increased numbers of Covid-19 cases, similar GDP per capita levels are also associated with differential case numbers. It is also clear that African governments have instituted on average slightly less stringent lockdown measures, whilst also being relatively benign in their income support responses. This is almost with the exception of South Africa, which recorded the highest stimulus package in a sample of developing countries. The shortage of hospital beds in Africa, is only one worrying statistic alluding to the pending health crisis, should the pandemic take root and spread in the continent.

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